

# CPRO-3D41GAME

4×1 HDMI Switcher



Operation Manual



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#### SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU
  if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

# **REVISION HISTORY**

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
VR0	07/04/10	Preliminary Release
VS1	22/04/13	Updated format/diagrams



# **CONTENTS**

I. Introduction	I
2. Applications	1
3. Package Contents	1
4. System Requirements	1
5. Features	2
6. Operation Controls and Functions	3
6.1 Top Panel	3
6.2 Front Panel	3
6.3 Left Panel	4
6.4 Right Panel	4
6.5 Rear Panel	5
6.6 Remote Control	5
7. OSD Menu	6
7.1 Entering the Menu	6
7.2 System Info	6
7.3 Sink EDID	7
7.4 Source Infoframe	7
7.5 Input Select	7
7.6 Audio Return	8
7.7 Exit	8
8. Connection Diagram	9
9. Specifications	10
10. Acronyms	



# 1. INTRODUCTION

This 4×1 HDMI Switcher is a high performance four-input & one-output High-Definition Multimedia Interface (HDMI) switcher with Audio Channel Return (ARC) and HDCP repeater functions along with fast switching between HDMI input ports. The system supports all 3D TV formats in addition to all HDTV formats up to 1080p 12-bit Deep Color. The included remote control gives users complete control over the selection of sources and makes the device incredibly user friendly.

# 2. APPLICATIONS

- Share a single TV/Monitor input between up to 4 source devices
- Add additional HDMI inputs to an AV Receiver
- Lecture room presentation
- Public display
- Showroom presentation

# 3. PACKAGE CONTENTS

- 4×1 HDMI Switcher
- Remote Control
- 5V/1 A Power Adaptor
- · Operation Manual

# 4. SYSTEM REQUIREMENTS

Source equipment such as games consoles, Blu-ray players (or a PC/Laptop with DVI with a DVI to HDMI adaptor cable) and a monitor or TV with HDMI connection cable.



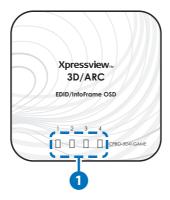
#### 5. FEATURES

- Support multiplexed HDMI 4-input and 1-output
- HDMI, HDCP 1.4 and CEC1.4 compliant
- HDMI support:
  - Audio Return Channel (ARC)
  - 3D TV support
  - CEC1.4
- Fast switching on all HDMI input ports
- Character and icon based On-Screen Display (OSD)
  - System information for Software version
  - Sink EDID
  - Source info frame
  - HDMI input Audio & Audio Return selection
- HDCP repeater support
- Deep Color support 36/30/24-bit, 1080p@60Hz
- Supports high resolution input and output:
  - PC: VGA to WUXGA
  - HDTV: 480i to 1080p@50/60 Hz, 1080p@24 Hz
- Supports HDMI input cable lengths of up to 10 meters (8/12-bit) and HDMI output cable lengths of up to 15 meters (8/12-bit).
- Audio support:
  - HDMI compatible audio interface
  - Dedicated, flexible audio input/output port
  - Dolby TrueHD
  - DTS-HD Master Audio 7.1CH
  - Full audio input and output support



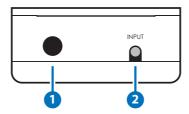
# 6. OPERATION CONTROLS AND FUNCTIONS

# 6.1 Top Panel



1 INPUT LED 1/2/3/4 Indicators: These LEDs will light to indicate the currently selected input.

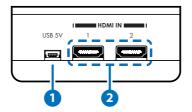
# **6.2 Front Panel**



- 1 IR Remote Control Sensor: Receives IR signals from the supplied remote control.
- 2 INPUT: Press this button repeatedly to cycle through the input sources, the LED will illuminate to indicate the active input.

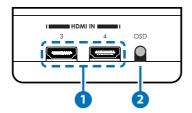


# 6.3 Left Panel



- 1 USB 5V: Connect the USB power port to any powered USB port with a Mini-B to A USB cable or a USB Mini-B to AC adaptor.
- 2 HDMI IN 1/2: Connect to HDMI source devices such as a games console with HDMI cables or a DVI source device such as a PC with DVI to HDMI cables.

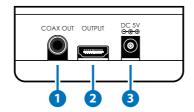
# **6.4 Right Panel**



- 1 HDMI IN 3/4: Connect to the HDMI source devices such as a Bluray player or a Set-top Box with HDMI cables.
- **2 OSD:** Press this button to bring up the OSD on the display and press it again to turn it off.



#### 6.5 Rear Panel



- 1 COAX OUT: Connect to the co-axial input on an AV Receiver for digital audio output. When the HDMI input signal has the Audio Return Channel (ARC) activated, the audio from the HDTV will be output from the co-axial output. If the ARC function is not active then the audio from the source device will be output.
- **2 OUTPUT:** Connect to a HDMI equipped TV/monitor or AV receiver for display of the selected HDMI source signal.
- 3 **DC 5V:** Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet. The LED will light when connected to power.

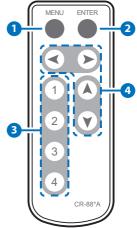
Note:

- 1. This device only supports 2 Channel PCM only.
- The display must support the ARC function and must be active for this feature to function.

3. The display's ARC enabled HDMI connection must be connected to the device.

# **6.6 Remote Control**

- 1 MENU: Press to enter the OSD menu.
- 2 ENTER: Press to confirm the selection.
- 3 INPUT 1/2/3/4: Press to directly select the required input.
- ▼ : Use the directional keys to navigate the OSD menu and adjust the settings.





### 7. OSD MENU

# 7.1 Entering the Menu

- Press the OSD button on the device or the MENU key on the remote control to bring up the OSD on the display.
- Press the Up or Down [▲/▼] keys to highlight an option.
- Press the Left or Right [◄/▶] keys to select the option.
- Press the 'Enter' key to confirm/exit the selection.



# 7.2 System Info

- Press the Up or Down [▲/▼] keys to highlight the 'System Info' option.
- Press the 'Enter' key to check the input/output device information and software version.
- Press the 'MENU' key to exit the menu.
- Press the 'Enter' key to confirm/exit the selection.



#### 7.3 Sink EDID

- Press the Up or Down [▲/▼] keys to highlight the 'Sink EDID' option.
- Press the Left or Right [◄/▶] keys to select the option.
- Press the 'Enter' key to confirm/exit the selection.
- Press the 'MENU' key to exit the menu.

OPTION	DESCRIPTION
Block Data	To check the sink Block0 and Block1's table
	of EDID
Description	To check the sink description of EDID

# 7.4 Source Infoframe

- Press the Up or Down [▲/▼] keys to highlight the 'Source Infoframe' option.
- Press the Left or Right [◄/▶] keys to select the option.
- Press the 'Enter' key to confirm/exit the selection.
- Press the 'MENU' key to exit the menu.

OPTION	DESCRIPTION
AVI	To check the source video infoFrame
(AVI infoframe data)	Packet
AUD	To check the source audio infoFrame
(Audio infoframe data)	Packet

# 7.5 Input Select

- Press the Up or Down [▲/▼] keys to highlight the 'Input Selection' option.
- Press the Left or Right [◀/▶] keys to select the option.
- Press the 'Enter' key to confirm/exit the selection.
- Press the 'MENU' key to exit the menu.



# 7.6 Audio Return

- Press the Up or Down [▲/▼] keys to highlight the 'Audio Return' option.
- Press the Left or Right [◀/▶] keys to select the option.
- Press the 'Enter' key to confirm/exit the selection.
- Press the 'MENU' key to exit the menu.

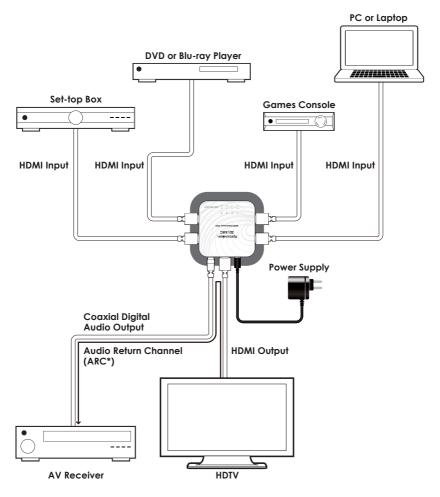
OPTION	DESCRIPTION
Audio Return	On/Off

# **7.7 Exit**

- Press the Up or Down [▲/▼] keys to highlight the 'Exit' option.
- Press the 'MENU' key to exit the menu.



# 8. CONNECTION DIAGRAM



\*ARC Equipped HDMI Connection Only



### 9. SPECIFICATIONS

Frequency Bandwidth 2.25 Gbps

Input Ports4×HDMI Female portsOutput Port1×HDMI Female port

**HDMI Audio Output** PCM 2CH, 5.1CH, 7.1CH, Dolby 5.1, DTS5.1,

Dolby Digital Plus, Dolby TrueHD, DTS-HD

 HDMI Cable In
 1080p 8-bit (10m), 12-bit (10m)

 HDMI Cable Out
 1080p 8-bit (15m), 12-bit (15m)

**Resolution Support** PC: VGA~WUXGA

HDTV: 480i~1080p@50/60 Hz, 1080p@24 Hz

Coaxial Audio Output PCM 2 CH

**Power Supply** 5 V/1 A DC (US/EU standards, CE/FCC/UL

certified)

**ESD Protection** Human Body Model:

±8kV (air-gap discharge) ±4kV (contact discharge)

**Dimensions** 100mm (W)×70mm (D)×20mm (H)

Weight 90 g
Chassis Material Plastic
Color White
Power Consumption 4W

Operating Temperature  $0 \degree C \sim 40 \degree C / 32 \degree F \sim 104 \degree F$ Storage Temperature  $-20 \degree C \sim 60 \degree C / -4 \degree F \sim 140 \degree F$ Relative Humidity  $20 \sim 60 \% RH \text{ (non-condensing)}$ 

# 10. ACRONYMS

ACRONYM	COMPLETE TERM
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
HDCP	High-bandwidth Digital content protection
HDMI	High Definition Multimedia Interface

